



The Economic Value of Luna Community College



LUNA COMMUNITY COLLEGE (Luna) creates value in many ways. The college plays a key role in helping students increase their employability and achieve their individual potential. The college draws students to the region, generating new dollars and opportunities for the Luna Service Region.* Luna provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, Luna is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

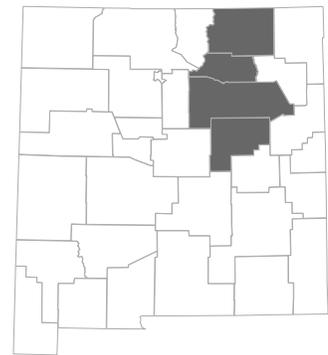
Luna influences both the lives of its students and the regional economy. The college supports a variety of industries in the Luna Service Region, serves regional businesses, and benefits society as a whole in New Mexico from an expanded economy and improved quality of life. Additionally, the benefits created by Luna extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by Luna on the business community and the benefits the college generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:

 **Economic impact analysis**

 **Investment analysis**

All results reflect employee, student, and financial data, provided by the college, for fiscal year (FY) 2021-22. Impacts on the Luna Service Region economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students, taxpayers, and society in New Mexico are reported under the investment analysis.



The Luna Service Region, New Mexico

Luna influences both the **lives of its students** and the **regional economy**.

* For the purposes of this analysis, the Luna Service Region is comprised of Colfax, Guadalupe, Mora, and San Miguel Counties.

Economic impact analysis



Luna promotes economic growth in the Luna Service Region through its direct expenditures and the resulting expenditures of students and regional businesses. The college serves as an employer and buyer of goods and services for its day-to-day operations. The college's activities attract students from outside the Luna Service Region, whose expenditures benefit regional vendors. In addition, Luna is one of the primary sources of higher education to the Luna Service Region residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

Operations spending impact



Luna adds economic value to the Luna Service Region as an employer of regional residents and a large-scale buyer of goods and services. In FY 2021-22, the college employed 161 full-time and part-time faculty and staff, 88% of whom lived in the Luna Service Region. Total payroll at Luna was \$11.1 million, much of which was spent in the region for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the college spent \$10.2 million on day-to-day expenses related to facilities, supplies, and professional services.

Luna's day-to-day operations spending added \$12.8 million in income to the region during the analysis year. This figure represents the college's payroll, the multiplier effects generated by the in-region spending of the college and its employees, and a downward adjustment to account for funding that the college received from regional sources. The \$12.8 million in added income is equivalent to supporting 177 jobs in the region.

Student spending impact



Around 14% of students attending Luna originated from outside the region in FY 2021-22, and some of these students relocated to the Luna Service Region to attend Luna.** These students may not have come to the region if the college did not exist. In addition, some in-region students, referred to as retained students, would have left the Luna Service Region if not for the existence of Luna. While attending the college, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$489.2 thousand in added income for the regional economy in FY 2021-22, which supported 10 jobs in the Luna Service Region.

** Due to data limitations, the percentage of out-of-region students relocating into the Luna Service Region and living off campus is estimated using information provided by other New Mexico institutions.

Impacts created by Luna in FY 2021-22



Operations spending impact

\$12.8 million

+



Student spending impact

\$0.5 million

+



Alumni impact

\$23.2 million



Total economic impact

\$36.4 million

OR

Jobs supported

565



Alumni impact



The education and training Luna provides for regional residents has the greatest impact. Since the establishment of the college, students have studied at Luna and entered the regional workforce with greater knowledge and new skills. Today, thousands of former Luna students are employed in the Luna Service Region. As a result of their education from Luna, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2021-22, Luna alumni generated \$23.2 million in added income for the regional economy, which is equivalent to supporting 379 jobs.

Total impact

Luna added \$36.4 million in income to the Luna Service Region economy during the analysis year, equal to the sum of the operations spending impact, the student spending impact, and the alumni impact. For context, the \$36.4 million impact was equal to approximately 2.4% of the total gross regional product (GRP) of the Luna Service Region. This contribution that the college provided on its own is as large as the entire Real Estate & Rental & Leasing industry in the region.

Luna's total impact can also be expressed in terms of jobs supported. The \$36.4 million impact supported 565 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. This means that one out of every 37 jobs in the Luna Service Region is supported by the activities of Luna and its students. In addition, the \$36.4 million, or 565 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the spending of Luna and its students and the activities of its alumni in the Health Care & Social Assistance industry sector supported 85 jobs in FY 2021-22. If the college did not exist, these impacts would not have been generated in the Luna Service Region.

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Luna impacts by industry (jobs supported)



Investment analysis



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. The analysis presented here evaluates Luna as an investment from the perspectives of students, taxpayers, and society in New Mexico.

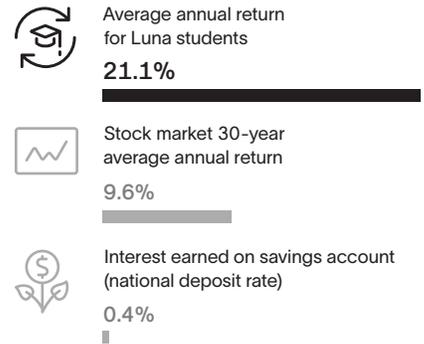
Student perspective

 In FY 2021-22, Luna served 1,121 students. In order to attend the college, the students paid for tuition, fees, books, and supplies. They also took out loans and will incur interest on those loans. Additionally, students gave up money they would have otherwise earned had they been working instead of attending college. The total investment made by Luna's students in FY 2021-22 amounted to a present value of \$3.3 million, equal to \$1.4 million in out-of-pocket expenses (including future principal and interest on student loans) and \$1.9 million in forgone time and money.

In return for their investment, Luna's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average Luna associate degree graduate from FY 2021-22 will see annual earnings that are \$7,000 higher than a person with a high school diploma or equivalent working in New Mexico. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$266,000 in higher earnings per graduate. The present value of the cumulative higher future earnings that Luna's FY 2021-22 students will receive over their working careers is \$19.6 million.

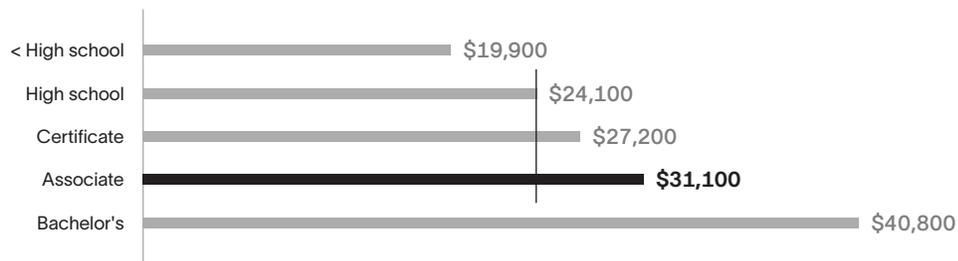
The students' benefit-cost ratio is 6.0. In other words, for every dollar students invest in Luna in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$6.00 in higher future earnings. Annually, the students' investment in Luna has an average annual internal rate of return of 21.1%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.6%.

Students see a high rate of return for their investment in Luna



Source: Forbes' S&P 500, 1992-2021. FDIC.gov, 2-2022.

The average associate degree graduate from Luna will see an increase in earnings of **\$7,000** each year compared to a person with a high school diploma or equivalent working in New Mexico.



Source: Lightcast employment data.

Taxpayer perspective



Taxpayers invested \$11.1 million in the college in FY 2021-22, equal to the amount of state and local government funding. In return, the college generates substantial benefits for taxpayers. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added revenue created in the state. As Luna students will earn more, they will make higher tax payments throughout their working lives. Students' employers will also make higher tax payments as they increase their output and purchases of goods and services. By the end of the FY 2021-22 students' working lives, the state and local government will have collected a present value of \$5.3 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of Luna students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that Luna students receive will generate savings in three main categories: 1) healthcare, 2) justice system, and 3) income assistance. Improved health will lower students' demand for national health care services. In addition, costs related to the justice system will decrease. Luna students will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit taxpayers. For a list of study references, contact the college for a copy of the main report. Altogether, the present value of the benefits associated with an education from Luna will generate \$1.0 million in savings to state and local taxpayers.

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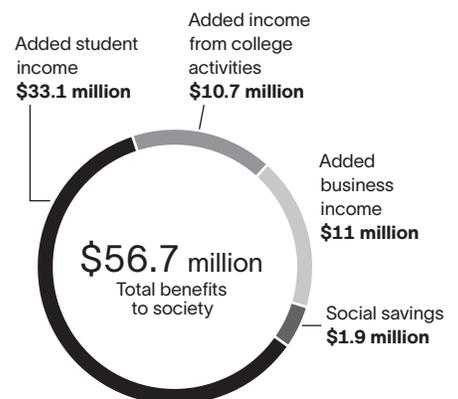
Social perspective



Society as a whole in New Mexico benefits from the presence of Luna in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to the added income from students' increased lifetime earnings (added student income) and increased business output (added business income), which raise economic prosperity in New Mexico.

Benefits to society also consist of the savings generated by the improved lifestyles of Luna students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers outlined above. Healthcare savings include avoided medical costs associated with smoking, alcohol dependence, obesity, drug abuse, and depression. Justice system savings include avoided costs to the government and society due to less judicial activity. Income assistance savings include reduced welfare and unemployment claims. For a list of study references, contact the college for a copy of the main report.

Social benefits in New Mexico from Luna



Source: Lightcast impact model.

Altogether, the social benefits of Luna equal a present value of \$56.7 million. These benefits include \$33.1 million in added student income, \$11 million in added business income, \$10.7 million in added income from college activities, as well as \$1.9 million in social savings related to health, the justice system, and income assistance in New Mexico. People in New Mexico invested a present value total of \$23.8 million in Luna in FY 2021-22. The cost includes all the college and student costs.

The benefit-cost ratio for society is 2.4, equal to the \$56.7 million in benefits divided by the \$23.8 million in costs. In other words, for every dollar invested in Luna, people in New Mexico will receive a cumulative value of \$2.40 in benefits. The benefits of this investment will occur for as long as Luna's FY 2021-22 students remain employed in the state workforce.

Summary of investment analysis results

The results of the analysis demonstrate that Luna is a strong investment for students and society. As shown, students receive a great return for their investments in an education from the college. From the taxpayer perspective, the benefits generated by the college and its students recover a significant portion of the costs borne by taxpayers and create a wide range of social benefits throughout New Mexico.



Student perspective	
Present value benefits \$19.6 million	
Present value costs \$3.3 million	
Net present value \$116.3 million	
Benefit-cost ratio	Rate of return
6.0	21.1%



Taxpayer perspective
Present value benefits \$6.3 million



Social perspective	
Present value benefits \$56.7 million	
Present value costs \$23.8 million	
Net present value \$32.9 million	
Benefit-cost ratio	Rate of return
2.4	n/a*

* The rate of return is not reported for the social perspective because the beneficiaries are not necessarily the same as the original investors.

Conclusion

The results of this study demonstrate that Luna creates value from multiple perspectives. The college benefits regional businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers to the workforce. Luna enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The college benefits state and local taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, Luna benefits society as a whole in New Mexico by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.



About the study

Data and assumptions used in the study are based on several sources, including the FY 2021-22 academic and financial reports from Luna, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Lightcast's Multi-Regional Social Accounting Matrix model, and a variety of studies and surveys relating education to social behavior. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of economic impact and investment effectiveness. For a full description of the data and approach used in the study, please contact the college for a copy of the main report.

The results of this study demonstrate that Luna creates value from **multiple perspectives.**



Lightcast provides colleges and universities with labor market data that help create better outcomes for students, businesses, and communities. Our data, which cover more than 99% of the U.S. workforce, are compiled from a wide variety of government sources, job postings, and online profiles and résumés. Hundreds of institutions use Lightcast to align programs with regional needs, drive enrollment, connect students with in-demand careers, track their alumni's employment outcomes, and demonstrate their institution's economic impact on their region. Visit lightcast.io/solutions/education to learn more or connect with us.